

REMARKS

Claims 12-16 are pending in this application. No amendment is made in this Response.

It is believed that this Response is fully responsive to the Office Action dated **May 6, 2011**.

Claims 12-16 are rejected under 35 U.S.C. §103(a) as being unpatentable over Hashizume [JP 10-168339] in view of Schneider [US 2002/0160231] in view of Jaffe [US 4,478,968]. (Office action paragraph no. 2)

The rejection of claims 12-16 is respectfully traversed and reconsideration of the rejection is requested.

Summary of the rejection as stated

Hashizume is cited as teaching a method of forming colored magnetic metal flake with a coating comprising an organic pigment such as phthalocyanine, comprising steps of mixing the magnet powder ([0012]) with a solution containing an organic pigment, citing paragraph [0040] as disclosing a slurry formed of permalloy flake, color pigment and mineral spirit, and then drying the magnet powder. The Examiner states that Hashizume discloses a range of diameter of coin-like flakes (circular particles) that overlaps the claimed range for the magnet powder. The Examiner states that Hashizume is silent as to the magnet powder being a rare earth magnet powder.

Schneider is cited for disclosing magnetic signs or cards at [0002]-[0004], and for teaching magnetic particles exemplified by ALNICO and rare earth magnetic materials. The Examiner states that it would have been obvious “to use a rare earth-containing magnetic powder

with the method taught by Schneider with reasonable expectation of success since Schneider teaches such metal powder would be obvious over ALNICO.”

The Examiner states (bottom of page 3) that Hashizume and Schneider do not disclose the added limitation of dispersing the pigment in weakly alkaline water whose pH is controlled to a range of 6.5 to 9.0.

On page 14 of the Office action, the Examiner now cites Jaffe as disclosing preparing an organic pigment, and that adding basified water to the pigment solution will improve dispersion of the pigment, with the pH being controlled to 7-14 (citing column 2, lines 15-40). The Examiner states that it would have been obvious “to expose the organic pigment to alkaline water at the range claimed by Jaffe ... in order to improve dispersion and the wetting properties of the pigment”

Arguments against the rejection

In arguing against the rejection, Applicant notes that Jaffe discloses a method of **manufacture of resin extended pigments**, which are used in a variety of polymeric media (column 1, line 11). In the process of Jaffe, the resin is incorporated with the pigment in a dry premilling particle size reduction step, which is then followed with a milling step in basified water or dilute aqueous basic salt solution (column 2, lines 19-25). The Examiner apparently is referring to this milling step in the rejection.

However, present claim 12 recites: “mixing a rare earth metal-containing magnet powder having an average particle major axis diameter in the range of 80 μm to 200 μm with a treating solution prepared by dispersing an organic pigment having an average particle major axis diameter in the range of 0.01 μm to 0.5 μm in weakly alkaline water whose pH is controlled to a

range of 6.5 to 9.0.” (Claim 16 similarly requires such weakly alkaline water). Note that the pH recited in claim 12 is the pH of the alkaline solution in which the organic pigment is dispersed to make the treatment solution, which is **then mixed with the rare earth metal-containing magnet powder**.

In the present rejection, the Examiner modifies the combination of Hashizume and Schneider, in particular, Hashizume’s step of mixing the magnet powder with a solution containing an organic pigment, since Hashizume does not disclose that this is weakly alkaline water whose pH is controlled to a range of 6.5 to 9.0. (In fact, Hashizume only discloses mineral spirits as the solvent). The Examiner cites Jaffe as providing a motivation for this modification.

However, the cited portion of Jaffe is of a **milling step** in the **production** of a resin extended pigment.

Specifically, in Jaffe, there is a dry premilling particle size reduction step (column 1, line 22; column 4, lines 49 and ff.). This is followed by the milling step in the basified water (column 5, lines 59 and ff.). Then: “After the milling operations and the solvent steam distillation, the resin extended pigment is normally extracted in a hot aqueous dilute acid ... to remove any metal which has become associated with the resin extended pigment during milling. Following the extraction step, the pigment is dried.” (Column 6, lines 42-47). This dried pigment is the **product resin extended pigment** in Jaffe.

That is, Jaffe’s milling step in basified water is **simply one step in the production** of the resin extended pigment. The milling step in basified water is not even the final production step in the pigment making process. This milling step is therefore unrelated to any mixing of the product pigment with any material to make a product containing that material and the pigment.

The purpose of Jaffe's milling step in basified water is therefore **completely unrelated** to Hashizume's step of mixing the magnet powder with an organic pigment in mineral spirits. This step in Jaffe therefore provides no suggestion or motivation for modifying Hashizume's slurry of an organic pigment in mineral spirits to be a weakly alkaline solution of pH 6.5 to 9.0, as required by claim 12.

Moreover, Applicant notes that, in fact, Jaffe is trying to produce a pigment that is **free of metal** (see column 4, lines 25-28, and column 6, lines 42-47). After the milling step in Jaffe, there is a further treatment of the pigment with acid to **remove any metal** (column 6, lines 42-47). Clearly, Jaffe's milling step cannot provide any motivation to modify the mixing step of Hashizume at [0040], which is specifically a mixing of pigment **with magnetic metal flake**.

Therefore, the references cannot be combined as proposed by the Examiner, and claims 12-16 are not obvious over Hashizume [JP 10-168339], Schneider [US 2002/0160231], and Jaffe [US 4,478,968], taken separately or in combination.


If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

U.S. Patent Application Serial No.: **10/541,454**
Response filed June 29, 2011
Reply to OA dated May 6, 2011

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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